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U.S. population 2000-2050 Other Asian 2020 2030 2040 2050 Representation of Women in Astronomy Ph.D. Year of graduation Representation of minorities in astronomy

Year

THE NEXT GENERATION OF A S T R O N O M E R S ONE INSTITUTION AT A TIME

ESS THAN FOUR DECADES FROM NOW, whites will no longer make up the majority of the U.S. population. The current lack of diversification in STEM fields will then become a severely limiting factor in our ability to attract and retain the best and brightest to these fields and maintain U.S. scientific leadership. Drastic measures must be put in place TODAY to broaden participation in STEM disciplines.

It is imperative to increase the percentage representation of women and minorities in the astronomical workforce by a factor of two for women, and by a factor of five for minorities, over the next 10 years. We advocate that universities, centers, national laboratories as well as funding agencies work together to design and implement a coordinated strategy to achieve this goal.

CHALLENGES TO REPRESENTATION IN ASTRONOMY

WOMEN:

- Pipeline is leaking drop-off through graduate school; continues at faculty promotion points to Associate and Full (>50%).
- Glass ceiling persists only 10% of the highest-level professionals are women.

MINORITIES — THE SITUATION IS MUCH WORSE:

- Situation is worse low single-digit percentage representation for Black or Hispanic individuals (Stassun, 2007).
- Lack of a pipeline to graduate levels in STEM disciplines.
- Lack of historical tracking data.

RECOMMENDATIONS

Develop and implement a coordinated effort between universities, centers, national laboratories, observatories and funding agencies to:

- Define ambitious academic and career goals to proactively create and maintain a diverse workforce
- Improve research and program funding to minority serving institutions
- Fund programs aimed at leveling the playing field for minority students
- Evolve organizational cultures and climates
- Evaluate recruitment practices for fairness
- Train search committees
- Develop mentoring opportunities
- Ensure transparent and bias free career requirements
- Maintain accountability

